		1		·	ASS'Y P/M: 51155F16D-5 SHEET:
FMEA REF.	FMEA REV.	NAME OTY & Drawing Ref.	FAILURE MODE AND	FAILURE EFFECT	HDWR / FUNC. RATIONALE FOR ACCEPTANCE 2/1R
		DESIGNATION	CAUSE	END ITEM	CRITICALITY SCREENS: A-PASS, B-PASS, C-PASS
2085	0	FAILURE DETECTOR GTY. 1. SCHEMATIC 812797	MODE: BRAKE DRIVER OR PORT BRAKES STATUS OUTPUT MONITOR FALLS TO "BRAKES ON". CAUSE(S): 1) FIRST OR SECOND BRAKE DRIVE FET OR CIRCUIT FAILS OPEN. 2) PORT POWER FLAG STATUS FAILS LOW. 3) H/W WATCHDOG TIMER OR GPC AUTOBRAKES SOURCES FAILS TO "BRAKES ON". 4) YOU FAILURE WARNING AUTOBRAKES SOURCE FAILS TO "BRAKES ON". 5) PORT BRAKES ON". 5) PORT BRAKES ON". 6) LOSS OF BRAKE BUS FUSE.	FOR ALL CAUSES: BRAKE TRUTH TABLE WILL FAIL IF BRAKES ARE OFF. ARM COMES TO REST. LOSS OF COMPUTER SUPPORTED MODES. LOSS OF LIMPING DURING END EFFECTOR CAPTURE. FOR CAUSES 1), 3), 4), AND 6) BRAKES ARE APPLIED BY HARDWARE. GPC ENTERS TDLE MODE. FOR CAUSE 2): BRAKE TRUTH TABLE WILL FAIL AND APPLY AUTO BRAKES IF BRAKES ARE OFF. GPC ENTERS TEMPERATURE MONITORING MODE. FOR CAUSE 5) GPC WILL DROP INTO "FOLE" MODE AND ARM WILL RECEIVE ZEAROED JOINT RATE COMMANDS. WORST CASE UMABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE CAPABILLITY. REDUNDANT PATHS REMAINING TO CONTINUE OPERATIONS: 1) DIRECT OREVE 2) BACK-UP DRIVE 3) JETTISON (TO SECURE ORBITER)	DESIGN FEATURES THE BRAKE DRIVER IS IMPLEMENTED USING FET POWER TRANSISTORS, CONNECTED IN A SERIES REDUMDANT CONFIGURATION. THE CIRCUIT EMPLOYS CORTHUNOUS TESTING TO VERIFY THE INTEGRITY OF THE BRAKE DRIVE CIRCUIT. THE DAG BRAKE SWITCH CONTROLS THE OPERATION OF THE BRAKE DRIVER THROUGH AN OPTO-ISOLATOR WHICH ACTS AS A SOLID-STATE RELAY. OPTO-ISOLATORS (DEODE AND TRANSISTOR) MEET THE SAME OUALITY AND APPLICATION CRITERIA THAT HAVE BEEN APPLIED TO DISCRETE SEMICONDUCTORS. INDUCTORS ARE DESIGNED SPECIFICALLY FOR THE APPLICATION. THE DESIGN CRITERIA, INCLUDING CHOICE OF MAIERIALS AND TEST REQUIREMENTS ARE IN ACCORDANCE WITH MIL-1-27. WORST CASE STRESS LEVELS DO NOT EXCEED THOSE ALLOWED BY SPAR RMS-PA.003. ALL RESISTORS AND CAPACITORS USED IN THE DESIGN ARE SELECTED BY SPAR RMS-PA.003. ALL RESISTORS AND CAPACITORS USED IN THE DESIGN ARE SELECTED DEPARTED IN ACCORDANCE WITH SPAR RMS-PA.003. ALL CERAMIC AND ELECTROLYTIC CAPACITORS ARE ROUTINELY SUBJECTED TO RADIOGRAPHIC INSPECTION. THE COMMAND OPTO-ISOLATOR ELEMENTS MEET THE SRMS PROGRAM REQUIREMENTS FOR SENI-CONDUCTORS. DISCRETE SEMICONDUCTOR DEVICES SPECIFIED TO AT LEAST THE IX LEVEL OF MIL-5-19500. ALL DEVICES ARE SUBJECTED TO THE APPLICATION OF THE PROCURED LOTS/DATE CODES ARE SUBJECTED TO DESTRUCTIVE PHYSICAL ANALYSIS (DPA) TO VERTIFY THE INTEGRITY OF THE MANUFACTURING PROCESSES. DEVICE SIRESS LEVELS ARE, DERAIDED IN ACCORDANCE WITH SPAR RMS-PA.003 AND VERTIFIED BY DESIGN REVIEW. FUSES ARE PROCURED TO MSFC SPEC 40M 38259. THE DESIGN UTILIZES PROVEN CIRCUIT TECHNIQUES AND IS IMPLEMENTED USING EMOS LOGIC DEVICES. CMOS DEVICES OPERATE AT LOW POWER AND HENCE DO NOT EXPERIENCE SIGNIFICANT OPERATING STRESSES. THE TECHNIQUES IN ALIVER AND DEVICE RELIABILITY HISTORY IS MEEL DOCUMENTED. ALL STRESSES ARE ADDITIONALLY REDUCED BY DEATING THE APPROPRIATE PAR APPLICATION ACCORDANCE MITH SPAR RMS PA.003. SPECIAL HANDLING PRECLUDE DATAGECYSTESS DUE TO ELECTROSTATIC DISCHARGE AND DEVICE RELIABILITY HISTORY IS MELL DOCUMENTED. ALL STRESSES ARE ADDITIONALLY REDUCED BY THE

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CRITICAL ITEMS LIST

FMEA

REV.

HAME, QTY, & DRAWING REF.

DESIGNATION

FAILURE

DETECTOR

SCHEMATIC

01Y. 1.

812797

FAILURE MODE

AND

CAUSE

BRAKE DRIVER

MODE:

OR PORT

BRAKES

STATUS

CUTPUT

HON1TOR

FAILS TO

CAUSE(S):

FIRST OR

CIRCUIT

PORT

LOW.

"BRAKES ON".

SECOND BRAKE DRIVE FET OR

FAILS OPEN.

POWER FLAG

STATUS FAILS

H/W WATCHOOG

TIMER OR GPC

"BRAKES ON".

AUTOBRAKES SOURCES

FAILS TO

S/W MCIU FAILURE

WARHING

OH".

OUTPUT **MONITOR**

CIRCUIT FAILS TO

LOSS OF BRAKE BUS

FUSE.

AUTOBRAKES

SOURCE FAILS TO "BRAKES

PORT BRAKES STATUS

"BRAKES ON".

FHEA

2085

PROJECT: SRMS (-5 MCIU INSTALLED)
ASS'Y NOMENCLATURE: MCIU SYSTEM: ELECTRICAL SUBSYSTEM ASS'Y P/N: 51155F160-5 FAILURE EFFECT HOUR / FUNC. RATIONALE FOR ACCEPTANCE 2/18 END LIEN CRITICALITY SCREENS: A-PASS, B-PASS, C-PASS FOR ALL CAUSES: ACCEPTANCE TESTS BRAKE TRUTH TABLE WILL FAIL THE MCIU IS SUBJECTED TO THE FOLLOWING ACCEPTANCE IF BRAKES ARE ENVIRONMENTAL TESTING AS AN LRU. OFF. ARM COMES TO REST. LOSS O VIBRATION: LEVEL AND DURATION - REFERENCE TABLE 3.2 OF COMPUTER SUPPORTED O THERMAL: +40 DEGREES C TO -16 DEGREES C (2 CYCLES) MODES. LOSS OF LIMPING DURING END EFFECTOR QUALIFICATION TESTS CAPTURE. FOR CAUSES 1), 3), 4), AND 6) THE MCIU IS SUBJECTED TO THE FOLLOWING LRU QUALIFICATION ENVIRONMENTS: BRAKES ARE APPLIED BY O VIBRATION: LEVEL AND DURATION - REFERENCE TABLE 3.2 HARDWARE, GPC ENTERS IDLE O SNOCK: BY SIMILARITY TO -3 MCIU MODE. O THERNAL: +51 DEGREES C TO -27 DEGREES C (10 CYCLES) FOR CAUSE 2): BRAKE TRUTH O HUMIDITY: BY SIMILARITY TO -3 MCSU TABLE WILL FAIL MIL-STO-461 AS MODIFIED BY SL-E-0002 (TESTS CEO1, CEO3, CS01, CS02, CS06, RE02 (N/B), RS01, RS02 AND APPLY AUTO O EMC: BRAKES IF BRAKES ARE OFF. GPC ENTERS TEMPERATURE O LIFE: 630 OPERATING HOURS MONITORING 1000 POWER ON/OFF CYCLES FOR CAUSE 5) GPC WILL DROP INTO "IDLE" FLIGHT CHECKOUT HODE AND ARM WILL RECEIVE PDRS OPS CHECKLIST (ALL VEHICLES) JSC 16987 ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE CAPABILITY. REDUNDANT PATHS REMAINING TO CONTINUE OPERATIONS: 1) DIRECT DRIVE 2) BACK-UP DRIVE 3) JETTISON (TO SECURE ORBITER)

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PREPARED BY:

MFWG

SUPERCEDING DATE: NONE

DATE: 11 JUL 91

O PAILURE DIFFECTION BRACE DRIVER OR PORT STATUS OF	FMEA REF.	FMEA REV.	NAME Q1Y, & DRAWING REF. DESIGNATION	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END LIEM	HDWR / FUNC. RATIONALE FOR ACCEPTANCE 2/1R CRITICALITY SCREENS: A-PASS, B-PASS, C-PASS
VALIDATION STATUS AND HARDWARE CONFIGURATION IS CONVENED BY	2085		DETECTOR QTY. 1. SCHEMATIC	BRAKE DRIVER OR PORT BRAKES STATUS OUTPUT HONITOR FAILS TO "BRAKES ON". CAUSE(S): 1) FIRST OR SECOND BRAKE DRIVE FET OR CINCUIT FAILS OPEN. 2) PORT POWER FLAG STATUS FAILS LOW. 3) H/M WATCHDOG TIMER OR GPC AUTOBRAKES SOURCES FAILS TO "BRAKES ON". 4) S/W HCIU FAILURE WARNING AUTOBRAKES SOURCE FAILS TO "BRAKES ON". 5) PORT BRAKES STATUS CUITPUT HONITOR CIRCUIT FAILS TO "BRAKES ON". 6) LOSS OF BRAKE BUS	BRAKE TRUTH TABLE WILL FAIL IF BRAKES ARE OFF, ARM COMES TO REST. LOSS OF COMPUTER SUPPORTED MODES. LOSS OF LIMPING DURING END EFFECTOR CAPTURE. FOR CAUSES 1), 3), 4), AND 6) BRAKES ARE APPLIED BY HARDWARE. GPC ENTERS TOLE MODE. FOR CAUSE 2): BRAKE TRUTH TABLE WILL FAIL AND APPLY AUTO BRAKES ARE OFF. GPC ENTERS TEMPERATURE MONDE, FOR CAUSE 5) GPC WILL DROP INTO "IDLE" MODE AND ARM WILL RECEIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARR DRIVE CAPABILITY. REDUNDANT PATHS REMAINING TO CONTINUE OPERATIONS: 1) OTRECT ORIVE 2) BACK-UP DRIVE 2) BACK-UP DRIVE 3) JETTISON (10	OCCUMENTED QUALITY CONTROLS ARE EXERCISED THROUGHOUT DESIGN PROCUREMENT, PLANNING, RECEIVING, PROCESSING FABRICATION, ASSEMBLY, IESTING AND SHIPPING OF THE MCIU. GOVERNMENT SCUREE INSPECTION IS INVOKED AT VARIOUS LEVELS OF COMPONENT ASSEMBLY AND TEST OPERATIONS. MANDATORY THISPECTION POTHIS ARE EMPLOYED AT VARIOUS LEVELS OF ASSEMBLY AND TEST. EEE PARTS INSPECTION IS PERFORMED AS REQUIRED BY SPAR-RMS-PA.003. EACH EEE PART IS QUALIFIED AT THE PART LEVEL TO THE REQUIREMENTS OF THE APPLICABLE SPECIFICATION. ALL EEE. PARTS ARE TOOX SCREENED AND BURNED IN. AS A MINIMUM, AS REQUIRED BY SPAR-RMS-PA.003. BY THE SUPPLIER. ADDITIONALLY, EEE PARTS ARE TOOX SCREENED AND BURNED IN. AS A MINIMUM, AS REQUIRED BY SPAR-RMS-PA.003. BY THE SUPPLIER. ADDITIONALLY, EEE PARTS ARE TOOX RE-SCREENED IN ACCORDANCE WITH REQUIREMENTS, BY AN INDEPENDENT SPAR APPROVED TESTING FACILITY. DPA IS PERFORMED AS REQUIRED BY PA.003 ON A RANDOMLY SELECTED 3X OF PARTS, MAINUMS PIECES, MINIMUM 3 PIECES FOR EACH LOT NUMBER/PAIS CODE OF PARTS RECEIVED. WIRE IS PROCURED, INSPECTED, AND TESTED TO SPAR-RMS-PA.003. RECEIVING INSPECTION VERIFIES THAT ALL PARTS RECEIVED ARE AS IDENTIFIED IN THE PROCUREMENT DOCUMENTS, THAT NO PHYSICAL DAMAGE HAS OCCURRED TO PARTS DURING SHIPMENT, THAT THE RECEIVING DOCUMENTS PROVIDE ADEQUATE TRACEABILITY INFORMATION AND SCREENING DATA CLEARLY IDENTIFIES ACCEPTABLE PARTS. PARTS ARE INSPECTED THROUGHOUT MANUFACTURE AND ASSEMBLY AS APPROPRIATE TO THE MANUFACTURING STAGE COMPLETED. THESE INSPECTIONS INCLUDE, PRINTED CIRCUIT BOARD INSPECTION FOR CORRECT SOLDERING, MIRE LOOPING, STRAPPING ETC. OPERATORS AND INSPECTION, DAMAGE AND ADEQUACY OF PLATED THROUGHOUT MANUFACTURES. POST P.C. BD. INSTALLATION INSPECTION, CHECK FOR CORRECT BOARD INSTALLATION, ALIGNMENT OF BOARDS, PROPER CONNECTOR CONTACT MATING, WIRE ROUTING, STRAPPING OF WIRES ETC., PRE-CLOSURE INSPECTION, MORKMANSHIP AND CLEANLINESS AND WORKMANSHIP (SPAR/GOVERNMENT REP. MANDATORY INSPECTION POINT) PRE-ACCEPTANCE INSPECTION COMPLETION, AS BUILT CONFIGURATION VERTIFICAT

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CRITICAL ITEMS LIST

PROJECT: SRMS (-5 MCLU INSTALLED)
ASS'Y NOMENCLATURE: MCTU

SYSTEM: ELECTRICAL SUBSYSTEM ASS'Y P/N: 51155F160-5

___ SHEET: __4

2085 O FAILURE MODE: FOR ALL CAUSES: QUALITY ASSURANCE IN CONJUNCTION WITH ENGINEERING,	
BERKET DRIVER GIT 1.1 SEPTITE BRAKES OF PORT POWER FLAG STATUS FAILS TO CAUSE 2): BRAKE TRUTH BRAKES ARE BRAK	DM AND

SD40237A ATTACHMENT -PAGE 362 OF 471

PREPARED BY:

MENG

SUPERCEDING DATE: NONE

DATE: 11 JUL 91

FMEA REF.	FMEA REV.	NAME QTY & DRAWING REF. DESIGNATION	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END LTEM	HDWR / FUNC. RATIONALE FOR ACCEPTANCE 2/1R CRITICALITY SCREENS: A-PASS, B-PASS, C-PASS
2085	0	FAILURE DETECTOR GTY. 1. SCHEMATIC 812797	MODE: BRAKE ORIVER OR PORT BRAKES STATUS OUTPUT MONITOR FAILS TO "BRAKES ON". CAUSE(S): 1) FIRST OR SECOND BRAKE DRIVE FET OR CIRCUIT FAILS OPEN. 2) PORT POMER FLAG STATUS FAILS LOW. 3) H/W WATCHOOG TIMER OR GPC AUTOBRAKES SOURCES FAILS TO "BRAKES ON". 4) S/W MCIU FAILURE WARNING AUTOBRAKES SOURCE FAILS TO "BRAKES ON". 5) PORT BRAKES ON". 5) PORT BRAKES OUTPUT MONITOR CIRCUIT FAILS TO "BRAKES ON". 6) LOSS OF BRAKES ON". 6) USS OF BRAKES ON". 6)	FOR ALL CAUSES: BRAKE TRUTH TABLE MILE FAIL IF BRAKES ARE OFF. ARM COMES TO REST. LOSS OF COMPUTER SUPPORTED MODES. LOSS OF LIMPING DURING END EFFECTOR CAPTURE. FOR CAUSES 1) 3) 4), AND 6) BRAKES ARE APPLIED BY HAROMARE. GPC ENTERS TOLE MODE. FOR CAUSE 2): BRAKES TRUTH TABLE WILL FAIL AND APPLY AUTO BRAKES IF BRAKES ARE OFF. GPC ENTERS TEMPERATURE MODITO "TOLE" MODE AND ARM WILL RECEIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE ZEROED JOINT RATE COMMANDS.	FABLURE HISTORY THERE HAVE BEEN NO FAILURES ASSOCIATED WITH THIS FAILURE MODE ON THE SRMS PROGRAM.
REPARED B	Y: !	HFWG	SUPERCEDING DATE	: NONE	DATE: <u>11 JUL 91</u> CIL REV: _

CRITICAL ITEMS LIST

PROJECT: SAMS (-5 MCIU INSTALLED) ASSIY NOMENCLATURE: MCTU SYSTEM: ELECTRICAL SUBSYSTEM ASS'Y P/N: 51155F160-5 SHEET: __6 FAILURE EFFECT HDWR / FUNC. 2/1R RATIONALE FOR ACCEPTANCE ON END ITEM CRITICALITY SCREENS: A-PASS, 8-PASS, C-PASS FOR ALL CAUSES: OPERATIONAL EFFECT BRAKE TRUTH

FMEA FMEA HAME, QTY, & FAILURE MODE DRAWING REF. REF. REV. AND DESTGNATION CAUSE 2085 0 FAILURE MODE: DETECTOR BRAKE DRIVER OTY. 1. OR PORT TABLE WILL FAIL SCHEMATIC BRAKES IF BRAKES ARE AUTOBRAKES. DIRECT DRIVE AND BACKUP AVAILABLE. LOSS OF 812797 STATUS OFF. ARM COMES TO REST. LOSS LIMPING. LOSS OF COMPUTER SUPPORTED MODES. CUTPUT **MONITOR** OF COMPUTER CREW ACTION FAILS TO SUPPORTED "BRAKES ON". HODES. LOSS OF LIMPING DURING CAUSE(\$): END EFFECTOR PULSED TO MAINTAIN PROPER RATES. CAPTURE. FIRST OR FOR CAUSES 1) SECOND BRAKE 3), 4), AND 6) BRAKES ARE DRIVE FET OR CIRCUIT APPLIED BY FAILS OPEN. HARDWARE. GPC 2) ENTERS IDLE PORT POWER FLAG STATUS FAILS FOR CAUSE 2): NONE LOW. BRAKE TRUTH TABLE WILL FAIL H/W WATCHDOG AND APPLY AUTO TIMER OR GPC BRAKES IF AUTOBRAKES BRAKES ARE OFF. SOURCES GPC ENTERS TEMPERATURE FAILS TO "BRAKES ON". MONETORING HODE. S/W MCIU FAILURE FOR CAUSE 51 VARHING GPC WILL DROP AUTOBRAKES INTO "IDLE" SOURCE FAILS MODE AND ARM TO "BRAKES WILL RECEIVE ON". ZEROED JOINT RATE COMMANDS. PORT BRAKES STATUS WORST CASE OUTPUT **HONITOR** UNABLE TO CIRCUIT RELEASE BRAKES. FAILS TO LOSS OF ARM "BRAKES ON". DRIVE CAPABILITY. LOSS OF BRAKE BUS REDUNDANT PATHS FUSE. REMAINING TO CONTINUE OPERATIONS: 1) DIRECT DRIVE 2) BACK-UP DRIVE 3) JETTISON (10

SELECT DIRECT DRIVE. SINGLE/DIRECT DRIVE SWITCH SHOULD BE

CREW TRAINING

CREW IS TRAINED TO ALWAYS OBSERVE WHETHER THE ARM IS RESPONDING PROPERLY TO COMMANDS.

MISSION CONSTRAINT

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PREPARED BY:

MFWG

SUPERCEDING DATE: NONE

SECURE ORBITER)

DATE: 11 JUL 91

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FMEA FMEA REF. REV.	DRAVING REF.	FAILURE MODE AND	FAILURE EFFECT	HDWR / FUNC. 2/1R		MALE FOR ACCEPTANCE	
	DESIGNATION	CAUSE	END LTEM	CRITICALITY		A-PASS, B-PASS, C-PASS	
2085 0	FAILURE DETECTOR GIV. 1. SCHEMATIC 812797	MODE: BRAKE DRIVER OR PORT BRAKES STATUS OUTPUT MONITOR FAILS TO "BRAKES ON". CAUSE(S): 1) FIRST OR SECOND BRAKE DRIVE FET OR CINCUIT FAILS OPEN. 2) PORT POWER FLAG STATUS FAILS LOW. 3) H/M MATCHOOG TIMER OR GPC AUTOGRAKES SOURCES FAILS TO "BRAKES ON". 6) S/M MCIU FAILURE MARNING AUTOBRAKES ON". 5) S/M MCIU FAILURE MARNING AUTOBRAKES ON". 5) PORT BRAKES ON". 6) SOURCE FAILS TO "BRAKES STATUS OUTPUT MONITOR CIRCUIT FAILS TO "BRAKES OM". 6) LOSS OF BRAKE BUS FUSE.	FOR ALL CAUSES: BRAKE TRUTH TABLE WILL FAIL IF BRAKES ARE OFF. ARM COMES TO REST. LOSS OF COMPUTER SUPPORTED MODES. LOSS OF LIMPING DURING END EFFECTOR CAPTURE. FOR CAUSES 1), 3), 4), AND 6) BRAKES ARE APPLIED BY HARDWARE. GPC ENTERS TOLE MODE. FOR CAUSE 2): BRAKE TRUTH TABLE WILL FAIL AND APPLY AUTO BRAKES IF BRAKES ARE OFF. GPC ENTERS TEMPERATURE MONDE. FOR CAUSE 5) GPC WILL DROP INTO "IDLE" MODE AND ARM WILL RECEIVE JEROED JOINT RATE COMMANDS. WORST CASE UNABLE TO RELEASE BRAKES. LOSS OF ARM DRIVE CAPABILITY. REDUMDANT PATHS REMAINING TO CONTINUE OPERATIONS: 1) DIRECT DRIVE 2) BACK-UP DRIVE 2) BACK-UP DRIVE 3) ETTISON (TO SECURE ORBITER)	SCREEN FAILURE	S		

	A NAME GTY & DRAWING REF. DESIGNATION	FAILURE MODE FAILUR AND CAUSE END	T HOUR / FUNC. RATIONALE FOR ACCEPTANCE
2085	FAILURE DETECTOR QTY. 1. SCHEMAFIC 012797	MODE: BRAKE DRIVER OR PORT BRAKES STATUS OUTPUT MOMITOR FAILS TO "BRAKES ON". CAUSE(S): 1) FIRST OR SECOND BRAKE DRIVE FET OR CIRCUIT FAILS OPEN. 2) PORT POWER FLAG SYATUS FAILS LOW. 3), 4), H/W WATCHDOG TIMER OR GPC AUTOBRAKES SOURCES FAILS TO "BRAKES ON". 4) S/W MCIU FAILURE WARNING AUTOBRAKES ON". 5) PORT BRAKES ON". 5) PORT BRAKES ON". 6) PORT BRAKES ON". 6) BRAKES ON". 5) PORT BRAKES ON". 6) BRAKES ON". 6) BRAKES ON". 6) BRAKES ON". 6) CORDITION OPERATION	OMRSD OFFLINE APPLY BRAKE ON/OFF SIGNALS TO IMPUT OF MCIU. VERIFY VOLTAGE OM BRAKE BUS AND VERIFY NO BITE BITS ARE SET. OMRSD ONLINE INSTALLATION OPERATE BRAKE SWITCH. VERIFY VOLTAGE AT LONGERON INTERFACE AND VERIFY NO BITE ANNUNCIATIONS. OMRSD ONLINE TURNAROUND OPERATE BRAKE SWITCH. VERIFY BRAKES RESPOND CORRECTLY AND VERIFY NO BITE BITS ARE SET.

RMS/ELEC - 125

DATE: 11 JUL 91